CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-12
NPDES NO. CA0028363

WASTE DISCHARGE REQUIREMENTS FOR:

AMCHEM PRODUCTS, INC.
FREMONT, ALAMEDA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Amchem Products, Inc., hereinafter called the discharger, by application dated December 21, 1983, has applied for renewal of waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger's facility is located at 37899 Niles Boulevard, Fremont, immediately adjacent to Alameda Creek, a major groundwater recharge stream. The plant's principal products are metal cleaning chemicals, and its principal process is liquid blending. It is a compound plant, blending bases produced at other locations. The operations at this plant produce no process wastes except for washwater as noted in finding 3 below; discharge of stormwater runoff, in finding 4; and the possible spill of hazardous materials, in finding 5.

3. The only liquid process waste produced is from washing equipment when there is a change in product types or washing inside floor areas. To handle these wastes, a pretreatment unit is operated for reduction of heavy metals and suspended solids removal prior to discharge, under permit, to the Union Sanitary District. All sludge is removed to a Class I disposal site.

4. A separate storm sewer drains the transfer-storage, product storage, and miscellaneous areas and discharges an indeterminate quantity of potentially polluted stormwater runoff to Alameda Creek, a water of the United States. Stormwater runoff from this area contains pollutants from the storage, normal handling, and residuals of spills of acids; metal cleaning liquids containing chrome, nickel and zinc; and other minor amounts of miscellaneous chemicals. Shut-off valves are installed on the storm drain lines from these areas. These valves are maintained in a closed and locked position and opended only after a rain. Such drainage is done only under direct supervision of plant management to ensure that no polluted stormwater is discharged. A log book is maintained to record the date and time when valves are opened for stormwater discharge.

5. The discharge is presently governed by Waste Discharge Requirements, Order No. 78-89 which allows discharge into Alameda Creek.

6. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for the Alameda Creek and contiguous waters.

7. The beneficial uses of the Alameda Creek and contiguous water bodies are:

   - Water contact recreation
   - Non-contact water recreation
   - Wildlife Habitat
   - Warm and cold fresh water habitat
   - Fish migration and spawning

   - Industrial service and process supply
   - Agricultural Supply
   - Groundwater Supply
   - Fresh Water Replenishment
   - Navigation
   - Commercial and Sport Fishing

8. Effluent limitation and toxic effluent standards which have been or may be established pursuant to Sections 301, 302, 304, and 307 of the Federal Water Pollution Control Act, and amendments thereto, are applicable to the discharge.

9. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U. S. Environmental Protection Agency. Effluent limitations of this Order are based on the Basin Plan, State Plans and Policies, current plant performance, and best professional judgment. The limitations are considered to be those attainable by BAT, in the judgment of the Board.

10. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000 of Division 13) of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.

11. The Board has notified the discharger and interested agencies and persons of its intent to reissue waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT Amchem Products, Inc., in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Prohibitions

1. It shall be prohibited to discharge to waters of the state during the period from May 1 to October 1.

2. Except as in accordance with the terms of this Order it shall be prohibited at any time to discharge to waters of the state process wastes or wastewaters; product or material spills; or vehicle or equipment washdown wastes.

3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.

B. Stormwater Effluent Limitations

The following limitations apply to the discharge of stormwater runoff:

1. The volumetric discharge rate shall not be greater than one-two hundreth (i.e. 1:200 or 0.5%) of Alameda Creek flow as measured at the Niles Gaging Station. With the prior approval of the Executive Officer, higher discharges may be used in inverse proportion to the concentration of the highest level contaminant in relation to its standard (i.e. if all contaminants are less than 50% of maximum, the discharge rate can be twice the 1:200 specified or 1:100).

2. The discharge shall not have pH of less than 6.0 nor greater than 9.0.

3. The discharge shall not contain constiuents in excess of the following:

Constituent	Units	Maximum Concentration
a) Chromium (total)	mg/l	1.0
b) Zinc	mg/l	2.0
c) Nickel	mg/l	2.0

4. In any representative set of samples, the waste as discharged shall meet the following limit of quality:

TOXICITY: The survival of test fishes in 96 hour bioassays of the effluent as discharged shall be a median of 90% survival and a 90 percentile value of not less than 70% survival.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

a. Floating, suspended, or deposited macroscopic particulate matter or foam;

b. Bottom deposits or aquatic growths;

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the state in any place within one foot of the water surface:

a.	Dissolved oxygen	7.0 mg/l minimum. Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
b.	pH	Variation from natural ambient pH by more than 0.5 pH units.
c.	chromium (total)	0.05 mg/l maximum
d.	zinc	0.06 mg/l maximum
e.	nickel	0.06 mg/l maximum

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resource Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved applicable water quality standards are promulgated or approved pursuant to Section 303 or the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 78-89 adopted on October 17, 1978. Order No. 78-89 is hereby rescinded.

2. Responsible personnel shall be on site during all stormwater discharges.

3. Subsequent to October 1 and no later than October 15 of each year, the discharger shall:

   (a) wash down all paved exterior areas used for material and product transfer and/or storage;

   (b) empty all exterior drainage and sumps (excluding the internal waste treatment sump) of accumulated wastes;

   (c) if after sampling and analysis, the resulting washdown and sump wastes can comply with this Order's requirements, they may be discharged, otherwise the discharger shall dispose of the resulting washdown and sump wastes to a Board approved Class I disposal site.

4. The Discharger shall comply with all sections of this Order immediately upon adoption.

5. The discharger shall by April 1, 1985 submit a report, satisfactory to the Executive Officer, documenting compliance with Prohibition A.3.

6. The Discharger shall review and update annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

7. The discharger shall comply with the self-monitoring program as adopted by the Board and as may be amended by the Executive Officer.

8. The Discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977, except A.5, B.3 and B.5.

9. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).

10. Pursuant to Environmental Protection Agency regulations [40 CFR 122.42(a) the Discharger must notify the Regional Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture of a pollutant not reported in the permit application, or (2) a discharge of a toxic pollutants not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits.

11. This Order expires February 20, 1990. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

12. This Order shall serve as a National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objections. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 20, 1985.

ROGER B. JAMES
Executive Officer

Attachments:
Standard Provisions and
Reporting Requirements, April 1977
Self-Monitoring Program
Resolution 74-10

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. EFFLUENT

Station	Description
E-001	At any point in the outfall of the wastes between the point of discharge into Alameda Creek and the point at which all waste tributary to that outfall is present.

B. RECEIVING WATERS

Station	Description
C-R	In Alameda Creek 50 feet upstream from the point of effluent discharge.
C-1	In Alameda Creek, 100 feet downstream from the point of effluent merges with main stream and taken within the second hour of discharge. Quantity of streamflow in Alameda Creek shall be obtained from the Alameda County Water District, telephone (415) 797-1970. If point of merge is not 50 feet from outfall a map/plan showing the location will be submitted with monitoring report.

C. RAINFALL

Station	Description
R	A raingauge that is maintained on-site that accurately measures daily rainfall. The discharger may utilize a raingauge off-site provided it can be demonstrated to the satisfaction of the Executive Officer that the off-site raingauge represents the on-site rainfall.

II. SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

A. The schedule of sampling, measurements and analysis shall be given as Table I.

III. MODIFICATION OF PART "A", DATED JANUARY 1978

A. Exclusions: Paragraps C.3, C.4, C.5.a(5)(a), C.5.e, E.2.b, E.4, F.3.e, F.3.g, D.3.b, D.4.a, D.4.b, F.2, F.3.c.

B. Modifications:

1. Paragraph C.5.a(5)(a) Hydrographic condition:

   insert: "Streamflow conditions as recorded at Niles Gaging Station to include time, date, flow and person contacted." for Part A requirement.

2. Paragraph C.5.a(6)(c) precipitation:

   insert: "Precipitation on the day of observation only" for Part A requirement.

3. Paragraph D.2.a:

   delete: "...or on varying days selected at random."

   add: "...and shall be the first two stormwater runoff discharges of each month."

4. Paragraph F:

   Paragraph F.3.c.

   Change to read: A map or aerial photograph shall accompany the initial and annual report showing sampling and observation station locations.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-12.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revision will be ordered by the Executive Officer.

ROGER B. JAMES
Executive Officer

Effective Date_____

Attachment: Table I

TABLE 1

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001		C-R		C-1		R							
TYPE OF SAMPLE	G [1]	O	G	O	G	O								
Flow Rate (GPM)		E												
BOD, 5-day, 20°C or COD (mg/l & kg/day)														
Chlorine Residual & Dosage (mg/l & kg/day)														
Settleable Matter (ml/l-hr. & cu. ft./day)														
Total Suspended Matter (mg/l & kg/day)														
Oil and Grease (mg/l & kg/day)														
Coliform (Total) (MPN/100 ml) per req't														
Fish Tox'y 96-hr. TL % Surv'l in undiluted waste	M													
Ammonia Nitrogen (mg/l & kg/day)														
Nitrate Nitrogen (mg/l & kg/day)														
Nitrite Nitrogen (mg/l & kg/day)														
Total Organic Nitrogen (mg/l & kg/day)														
Total Phosphate (mg/l & kg/day)														
Turbidity (Jackson Turbidity Units)														
pH (units)	2/M		2/ 2/M		2/ 2/M									
Dissolved Oxygen (mg/l and % Saturation)														
Temperature (°C)														
Apparent Color (color units)														
Secchi Disc (inches)														
Sulfides (if DO<2.0 mg/l) Total & Dissolved (mg/l)														
Arsenic (mg/l & kg/day)														
Cadmium (mg/l & kg/day)														
Chromium, Total (mg/l & kg/day)	2/M													
Copper (mg/l & kg/day)														
Cyanide (mg/l & kg/day)														
Silver (mg/l & kg/day)														
Lead (mg/l & kg/day)														

TABLE 1 (Continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001		C-R		C-1		R							
TYPE OF SAMPLE	G [1/]	O	G	O	G	O	C-24							
Mercury (mg/l & kg/day)														
Nickel (mg/l & kg/day)	2/M													
Zinc (mg/l & kg/day)	2/M													
Total Organic Carbon (mg/l)	2/M													
All Applicable Standard Observations		E		E		E								
Bottom Sediment Analyses and Observations														
Rainfall (in/day)							D							
Freeboard (ft)														
Alameda Creek Streamflow (gpm)														

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours (used when discharge does not continue for 24-hour period)
Cont = continuous sampling
DI = depth-intergrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwaters stations
I = intake and/or water supply stations
R = Rainfall Station

FREQUENCY OF SAMPLING

E = each discharge occurrence
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December

2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous

NOTES:
1. Take a minimum of 3 grab samples on the day of sampling. The first sample for each day shall be taken during the first hour of discharge, and the others at equal time intervals thereafter. The three samples shall be combined and analyzed.

2. This measurement is not required when the pH of stream E-001 is above 6.5 and below 8.5.